



National Transportation Safety Board Aviation Accident Final Report

Location:	BARTOW, FL	Accident Number:	ATL96LA106
Date & Time:	07/09/1996, 1015 EDT	Registration:	N6356
Aircraft:	Bell 47G	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Aerial Observation		

Analysis

The purpose of the flight was to survey alligator nests along a canal. According to the pilot, they had been flying low (50 to 100 feet), at approximately 35 miles per hour, along the canal when the passenger warned him of utility lines crossing their intended route of flight. As the pilot executed a quick stop maneuver to avoid a collision with the utility lines, the tail rotor assembly collided with the ground. No mechanical problems were reported. The pilot also stated that a better scanning technique, and a slightly higher altitude may have prevented this accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate visual lookout, and his failure to maintain ground clearance, while maneuvering to avoid a collision with a utility line.

Findings

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: MANEUVERING

Findings

1. LOW ALTITUDE FLIGHT/MANEUVER - PERFORMED - PILOT IN COMMAND
2. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
3. OBJECT - WIRE, TRANSMISSION
4. MANEUVER TO AVOID OBSTRUCTIONS - PERFORMED - PILOT IN COMMAND
5. TERRAIN CONDITION - GROUND
6. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On July 9, 1996, at 1015 eastern daylight time, a Bell 47G helicopter, N6356, collided with the ground during a quick stop maneuver near Bartow, Florida. The aerial observation flight operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The helicopter was destroyed; the commercial pilot and his passenger received minor injuries. The flight departed Bartow, Florida, at 0845.

The pilot stated that the purpose of the flight was to survey alligator nests along the canal. According to the pilot, they had been flying low (50 to 100 feet), at approximately 35 miles per hour, along a canal when the passenger warned him of utility lines crossing their intended route of flight. As the pilot executed a quick stop maneuver to avoid a collision with the utility lines, the tail rotor assembly collided with the ground. No mechanical problems were reported. The pilot also stated that a better scanning technique, and a slightly higher altitude may have prevented this accident.

Pilot Information

Certificate:	Commercial	Age:	26, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	10/06/1995
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	1250 hours (Total, all aircraft), 500 hours (Total, this make and model), 1150 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N6356
Model/Series:	47G 47G	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	1671
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	06/23/1996, 100 Hour	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	20 Hours	Engines:	1 Reciprocating
Airframe Total Time:	18000 Hours	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	VO-435-A1F
Registered Owner:	MAVERICK HELICOPTER INTER	Rated Power:	220 hp
Operator:	MAVERICK HELICOPTER INTER	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LAL, 142 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	0950 EDT	Direction from Accident Site:	350°
Lowest Cloud Condition:	Scattered / 1500 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 12000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29° C / 24° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0845 EDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Report Date:	12/23/1996
Additional Participating Persons:	HOPPER HARRIS		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).